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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/471,030	12/23/1999	MASANORI WAKAI	35.C14127	6923

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FITZPATRICK CELLA HARPER & SCINTO  
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NEW YORK, NY 10112

EXAMINER
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SPOONER, LAMONT M

ART UNIT	PAPER NUMBER
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2626

MAIL DATE	DELIVERY MODE
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10/30/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/471,030

**Applicant(s)**

WAKAI ET AL.

**Examiner**

Lamont M. Spooner

**Art Unit**

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,10-19,23,32-41 and 51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,10-19,23,32-41 and 51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Introduction***

1. This office action is in response to applicant's arguments filed 9/10/2007. Claims 1, 10-19, 23, 32-41 and 51 are currently pending and have been examined.

### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/10/07 has been entered.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

4. Claims 1, 23 and 45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. More specifically, claim 1 cites, "conversion means for converting information input from any of said plurality of input means into a word representing the information." The Examiner requests applicant to specifically point out where this is taught in the disclosure, wherein, for example on p.10 lines 21-27 and p.11. lines 1-14, applicant teaches character and non-character recognition. The Examiner notes a character may comprise a word, however, a character does not necessarily comprise a word, for example "12, 23" are characters that do not comprise a word, or applicant's "June1998"-see specification p.31 line 15, and may be generated from voice recognition, ocr, or hand-written information, furthermore the Examiner is unable to locate where applicant teaches non-character information being converting into words. Therefore, the newly cited limitation is considered new matter.

As currently stated, and interpreted, and in order to expedite prosecution, the Examiner has interpreted the "word" as any character string, wherein in

the previous rejection the touch screen production of (12, 23) is sufficient to read on applicant's current claim.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 10-19, 23, 32-41 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Namba et al (5,884,249) in view of Jackson et al (6,292,767 B1).

As per claim 1, Namba et al teach an information processing apparatus comprising (figures 1, 2, 9, 13 and 15):

a plurality of input means for inputting different types of information (his voice recognition section 1, his touch panel section 2, his keyboard section 3, col. 6, lines 50 to col. 7, line 15),

conversion means for converting information input from any of said plurality of input means into a word representing the information (ibid, inherent to a keyboard entry of a word, voice recognition-see C.19 lines 38,

39, his touch screen which produces (12, 23) the character string representation, and corresponding words, C.18 lines 50-54-Work table);

storage means for storing a plurality of words converted by said conversion means with an input time thereof (Fig. 1 item 4, his recognition selecting section, C.4 lines 10-19, lines 24-32, his input time stamp recognition); and

sorting means for sorting the plurality of words stored in said storage means in an order of the input time (Fig. 9 item 13, Fig. 10 item 13)

a knowledge base for storing knowledge of each concept which includes a word representing the concept (Fig. 3, C.6 lines 47, 49-his instruction information table, Fig. 1, item 10, C.9 lines 61-C.11 line 43), the concept type of the concept (ibid-his operation instruction function), a concept instance rule for defining a property of a concept instance to be filled in each slot providing for the concept (his operation instruction condition), and a surface rule for defining an order of a word representing the concept instance to be filled in each slot and a grammar of the word representing the concept (ibid-C.10 lines 48, 49-his previously prepared relationships as the defined...order...);

input concept instance generating means for generating a plurality of input concept instances corresponding to the plurality of words (C.16.line 61-C.17.line 8, Fig. 3 input as "detail this", "this" as falling in a concept group of "@ proximal relationship", C.9 lines 30-40-discussion of plurality of sophisticated semantic analysis with plurality of results, as the generated plurality of concept instances) sorted in the input time order (C.14.lines 17-55, ""this" indicates data around the coordinate (12, 23), based on the time "14(H): 25(M): 34 (S)" at which time the touch-panel was touched, and the estimated time stamp "14(H):25(M):33(S)" for "this""-Interpreted as the time order, and this information has been sorted in the input time order, - C.14.line 65-c.15.line 37-"this here"-sequence-which is sorted in an order accordance with the input time, c.15.lines 40-47-analysis) by said sorting means by referring to the knowledge stored in the knowledge base (see above information table section discussion); and

concept instance unifying means for unifying the plurality of input concept instances by filling a slot of one of the input concept instances with another one of the input concept instances having a concept type which matches with the property of the concept instance for the slot defined by the concept instance rule and the input order of the corresponding word

satisfies an order of a word defined by the surface rule (C.16.line 61-C.17.line 8-his coincidence algorithm as the unifying means, see Fig 4-item 23, and Fig. 3 item 21-concepts slots are filled by another concept which matches the property, and Fig. 4 indicates an order of a word defined, evidenced in the display-Fig. 4 item 23, and as discussed above-see surface rule discussion as it relates to the predetermined relationship).

Namba does not explicitly disclose a knowledge base for storing a concept instance rule for defining a property of a concept instance to be filled in each slot providing for the concept in correspondence with a slot type of the slot.

However, Jackson teaches these lacking limitations, a concept instance rule for defining a property...slot type of the slot (C.3.lines 37-45-his slot definitions file, grammar file, slot classes file, and slot combinations file, Fig. 2-his specification of application semantics). Therefore, at the time of the invention, it would have been obvious to one ordinarily skilled in the art to modify Namba's input with Jackson's input semantic specification. The motivation providing the benefit of input concept/semantic definition and interpretation for further matching with an input sentence thus allowing



input interpretation (interpreted as input concept instance generation), see C.3.lines 37-66.

As per claim 10, Namba and Jackson make obvious claim 1, and Namba further teaches wherein said status acquisition means acquires the operation status of said apparatus at an input time (Fig. 3-his "detail this" and input time, C.13.lines 2-13, Fig. 4 his display status as the operation status).

As per claim 11, Namba and Jackson make obvious claim 1, and Namba further teaches status storage means for storing a past status (C.8.lines 26-34-his storage area, and control information as status stored and read out, C.7.lines 55-67-his "...previously held instructions...") wherein said status concept instance generating means generates the status concept in accordance with the past status read from said status storage means (ibid, Fig. 3-his instruction contents, detail and display concept-generated from the previously held instructions).

As per claim 12, Namba and Jackson make obvious claim 1, and Namba et al further teaches wherein said input means can input key information (figure 1, his inputting means group 121).

As per claims 13, 16 and 17, Namba and Jackson make obvious claims 1 and 12, and Namba et al teach wherein said input means can input character information by converting the key information (figure 1, his touch panel 2 and his keyboard 3).

As per claim 14, Namba and Jackson make obvious claim 1, and Namba et al teach wherein said input means can input speech information (His voice recognition 1)).

As per claim 15, Namba and Jackson make obvious claim 1, and Namba et al teach wherein said input means can input character information by recognizing the speech information and converting the speech information into character information (his inputting means group 121).

As per claims 18-19, Namba and Jackson make obvious claim 1, and Namba et al teach wherein said input means can input handwritten information (figure 15, a graphic recognition section 143 which recognizes hand-written or printed characters of figures at col. 27, lines 38-67).

7. Claims 23, 32-41 and 45 are the same in scope and content as claims 1, and 10-19, above and therefore are rejected under the same rationale.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamont M. Spooner whose telephone number is 571/272-7613. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571/272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

lms  
10/16/07

  
PATRICK N. EDOUARD  
SUPERVISORY PATENT EXAMINER